

Remarks

The abstract and specification have been amended to make editorial changes therein, bearing in mind the criticisms in the Official Action, to place the application in condition for allowance at the time of the next Official Action.

The Official Action objects to the drawings for not showing the housing (claims 8-9 that included the volt/current meter have been deleted). Figure 1 shows the housing as element "H" and is discussed at page 12, lines 13-14. Reconsideration and withdrawal of the objection to the drawings is respectfully requested.

Claims 1-13 were rejected as anticipated by MAY 5,651,025. Independent claims 1 and 7 have been amended and reconsideration and withdrawal of the rejection are respectfully requested.

The Official Action refers to column 2, lines 63-67 and column 3, lines 1-19 of MAY. In column 2, MAY talks about the possibility of using "amplitude modulation" or "frequency modulation". MAY then discusses that while it is possible to use these techniques there are problems and that the MAY invention overcomes the problems by using "pulse position modulation".

Although the variable pulse width referred to in MAY may be viewed as a very simple form of frequency modulation, such a technique is more widely known in the art as "pulse width

modulation". That is, the technique is a method of modulation by means of varying pulse width whereby change in the pulse width results in change in spectral (frequency) characteristics incidentally rather than as the primary purpose of modulating the pulse width. Indeed, the means of modulating a "pulse width modulated" signal is performed in the time rather than frequency domain, further supporting the incidental nature of change in spectral (frequency) characteristics as the pulse width is modulated. Pulse width modulation differs substantially from the present invention because the invention uses frequency modulated tone bursts. Thus, in the system of the present invention the width of the bursts is generally held constant and the frequency of the signal within a burst is varied.

While MAY acknowledges potential problems with both amplitude-and-frequency-modulation of the pulses, MAY does not present any practical solutions as to how to solve these problems. MAY simply moves to the use of pulse position modulation as a viable solution to the problems.

The present invention not only uses a type of frequency modulation which is completely different from the techniques suggested in MAY but also provides a solution to the problems that accompany other methods which use frequency modulated signals.

The Official Action also refers to column 4, lines 18-53 of MAY. This part of the MAY specification deals with knowing in what area of the frequency spectrum the signal that carries the information lies. Knowing in which area the frequency spectrum the received signal must lie is a prerequisite for any communication system that is to operate reliably in the presence of other signals. The only solution given by MAY is that of making use of pulses that resemble electric fence pulses themselves. The referenced disclosure in MAY in no way makes mention of the possibility of other methods that may achieve similar or better performance.

In the present invention, there is no requirement that the burst signals resemble or mimic normal electric fence pulses in any way, but yet the received signal lies in a completely known or predictable frequency spectrum and continues to do so after being transmitted along an electric fence conductor, even more so than do pulses that resemble normal electric fence pulses. The preservation of the signals frequency spectrum and, thereby the information, as achieved by the present invention, is superior to the pulses as described in MAY.

The present invention, therefore, relies on the use of frequency modulated tone bursts, which is a method substantially different to that described in MAY. In fact, MAY, at column 1, lines 43-49 specifically teaches away from the use of "tone

bursts". Therefore, neither does MAY anticipate the present invention nor render the invention obvious.

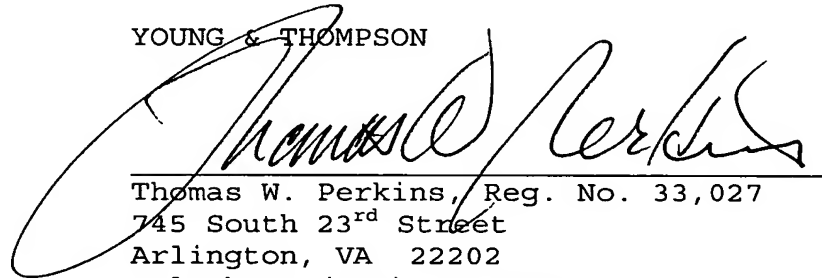
In addition, claim 7 invokes §112, sixth paragraph and is to be interpreted accordingly. It is not believed that MAY discloses an equivalent structure.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17.

Respectfully submitted,

YOUNG & THOMPSON



Thomas W. Perkins, Reg. No. 33,027
745 South 23rd Street
Arlington, VA 22202
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

TWP/lrs

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APPENDIX:

The Appendix includes the following item:

- amended Abstract of the Disclosure